

# UC San Diego

## UC San Diego Previously Published Works

### Title

Spatial Patterns From High-Resolution Electrogastrography Correlate With Severity of Symptoms in Patients With Functional Dyspepsia and Gastroparesis.

### Permalink

<https://escholarship.org/uc/item/6kk2b8jw>

### Journal

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Peer reviewed

Dear Dr. John DiBaise,

We would like to thank you for selecting excellent reviewers to review our manuscript: "AJG-18-1674 - Abnormal Spatial Patterns on Cutaneous High-Resolution Electrogastrogram Correlate with Symptom Severity in Functional Dyspepsia and Gastroparesis". We received the decision letter and we want to express our extreme confusion with the decision to reject the paper even though the reviewers were clearly in support of accepting the manuscript for publication in AJG.

Despite strong recommendations from both reviewers to accept the paper, we understand the editorial board's concern with the fit of AJG-18-1674 for the AJG clinical audience,. We seek your wise judgement in giving us the chance to propose a change to the manuscript and address the main concerns raised by the reviewers to make it a better fit for the AJG.

- Reviewer 1 raised concerns about the cutaneous measure of slow wave speed and its interpretation relative to the serosal slow wave speed. We completely agree with all of the reviewer comments. The physiology of how multiple serosal wavefronts sum to a single cutaneous wavefront is currently unknown and requires further attention. Nonetheless, our key finding was that the degree of abnormalities in the *direction* of the cutaneous wave is directly associated with symptom severity. We propose to remove the preliminary results pertaining to the cutaneous measures of slow wave speed. This does not change the the key finding of our study, which we believe is of great interest to clinicians who manage the care for patients with gastroparesis and functional dyspepsia.
- Reviewer 2 raised concerns about the lack of funding regarding the study. Our team takes great pride in accomplishing this study without funding. Since we were unable to secure funding for the project, we had to be very resourceful to complete the study. I personally enrolled my patients with gastroparesis and functional dyspepsia who previously had abdominal CT imaging and a gastric emptying study as part of their clinical care. We were only able to enroll patients who agreed to participate without compensation. We conducted recordings during the weekends, which allowed us to use one of Dr. Coleman's offices, utilize free campus parking for research subjects, and borrow EEG recording equipment in Dr. Coleman's lab that was purchased for other research purposes. All our analysis was done with free open-source software; programming was done in Python and CT analysis in Horos. The minimal remaining costs (e.g. disposable electrodes and skin prep) we paid for through Dr. Coleman's and my discretionary funds. A patent application has been filed pertaining to part of what we have disclosed in the manuscript. We are happy to

include this information in the manuscript, along with the use of our discretionary funds.

We understand the reason for the delay in getting back to us. We believe that the AJG audience will appreciate the content of this paper, especially since it could be a “clinical breakthrough” as Reviewer 1 suggested. Please let us know if a re-consideration and/or follow-up with the reviewers sounds reasonable. We are more than happy to have a conference call as well if you feel that it is necessary.

Sincerely,  
David Kunkel, MD